

Claims

- [c1] *A Three Piece Timing Pulley Assembly that is comprised of:*
- A Centerpiece Hubless and Flangeless Inner Driver Timing Pulley.
 - Two Outer Driven Synchronized Timing Pulleys.
 - The Inner Driver Timing Belt is mounted on the Inner Driver Timing Pulley.
 - The Outer Driven Timing Belt is mounted on the Synchronized Outer Driven Timing Pulleys.
- [c2] The Outer Driven Synchronized Timing Pulleys of claim 1 are positively driven from within the apparatus described in claim 1 by the Centerpiece Inner Driver Timing Pulley as follows:
- The Inner Driver Timing Pulley diameter in claim 1 is less than that of the Outer Driven Synchronized Timing Pulleys diameter in claim 1.
 - The Inner Driver Timing Pulley diameter is such that the top surface of the mounted Inner Driver Timing Belt supports the bottom teeth of the mounted Outer Driven Timing Belt.
 - The Outer Driven Timing Belt is partially supported by the said Inner Driver Timing Belt.

The Inner Driver Timing Belt is remotely driven by a timing pulley connected to a motor shaft or a gear head shaft.

[c3] The apparatus in claim 2 defines and comprises the following planes:

The top surface of this said Inner Drive Belt defines the Interface Drive Plane.

The bottom surface of this said Outer Driven Timing Belt timing teeth defines the Interface Driven Plane.

The said Interface Driven Plane and the said Interface Driver Plane enclose the Interface Gap.

[c4] According to claim 3, this said Interface Drive Plane width is confined within the space occupied by the Outer Driven Timing Belt, which allows this said Hybrid Pulley Assembly thereof to be driven from within the apparatus in claim 1.